



## Section 07 42 Wall Panels/ 09 70 Wall Finishes

### Part 1 – General

#### 1.01 Scope

Furnish and install the Metal Wall Panel System as manufactured by Steel Ceilings Inc., Johnstown, Ohio

#### 1.02 Related Sections

- Section 09 20 Plaster and Gypsum Board
- Section 23 00 Heating, Ventilating and Air-conditioning
- Section 26 50 Lighting

#### 1.03 References

- American Society for Testing and Materials (ASTM)

**C635** Standard specification for the manufacture, performance and testing of metal suspension systems for acoustical tile and lay-in panel ceilings

**C636** Standard practice for installation of metal ceiling suspension systems for acoustical tile and lay-in panels

**E84** Test method for surface burning characteristics of building materials

**CISCA** Ceilings and Interior Systems Construction Association

#### 1.04 Submittals

- Provide product data sheets listing dimensions, style, edge detail, perforation pattern and finish
- Alternates require prior approval no later than 21 days prior to bid date. In addition to the requirements above, submittals for approved alternates must include samples of actual products to be substituted together with test certificates supporting performance claims, a mock up and a written warranty.

#### 1.05 Project Conditions

##### Environmental Requirements

- Area to receive ceiling systems shall be protected from the weather
- Wet trades work shall be complete and dry prior to installation of ceiling system
- Installation shall not proceed until the temperature and humidity conditions closely approximate finish condition

#### 1.06 Attic Stock

Provide 2% (3% etc) of the ceiling system area materials to be used as attic stock

#### 1.07 Performance

- Materials and installation must comply with Local Building Code and Regulations
- Materials should be stored and handled in accordance with CISCA's *Acoustical Ceilings – Use and Practice*
- There are no special seismic requirements

### Part 2 – Products

#### 2.01 Manufacturer

Metal Wall Panel Systems shall be as manufactured by Steel Ceilings Inc., Johnstown, Ohio:

[www.steelceilings.com](http://www.steelceilings.com)

#### 2.02 Materials

##### Direct Hung System

- Panels will be hung onto wall with sturdy picture-frame-type screws suitable in size to fit the pear-shaped hanging holes

##### Wall Bracket System (Alternatives)

- Wall bracket shall be either progressive or starter brackets as shown on the drawings. Bracket shall be manufactured from 18-gauge galvanized steel and shall have special tabs spaced vertically every 10" that insure the flatness of the panel
- Reveals can be created between the panels as shown on the drawings
- A U-channel can be installed at the top of the metal wall panels to prevent access

##### Metal Wall Panels

- Metal pans shall be formed from 0.063" aluminum (18-gauge galvanized steel – minimum A40/G40, stainless steel)
- Panels shall be manufactured in the sizes as shown on the drawings
- Panels shall be square edge and the back flange shall have pear-shaped hanger holes (be notched to engage

with the wall brackets). All panels shall be 100% accessible.

- The core infill of the wall panels shall be a 6-lb. density fiberglass to provide a rigid structure
- Panels shall be perforated (non-perforated) with pattern B (C, D, F, FF, G, M, R, S or custom perforation)
- Panels shall be post painted to seal all perforations with polyester powder global white (color) gloss level 12% to 15% (natural anodized, brushed number 4)

##### Acoustical Infill

- For perforated metal wall panels, face of fiberglass will be black or panels shall be supplied with a non-woven acoustic fleece in conjunction with the fiberglass core to provide designated sound absorption

### Part 3 – Execution

#### 3.01 Examination

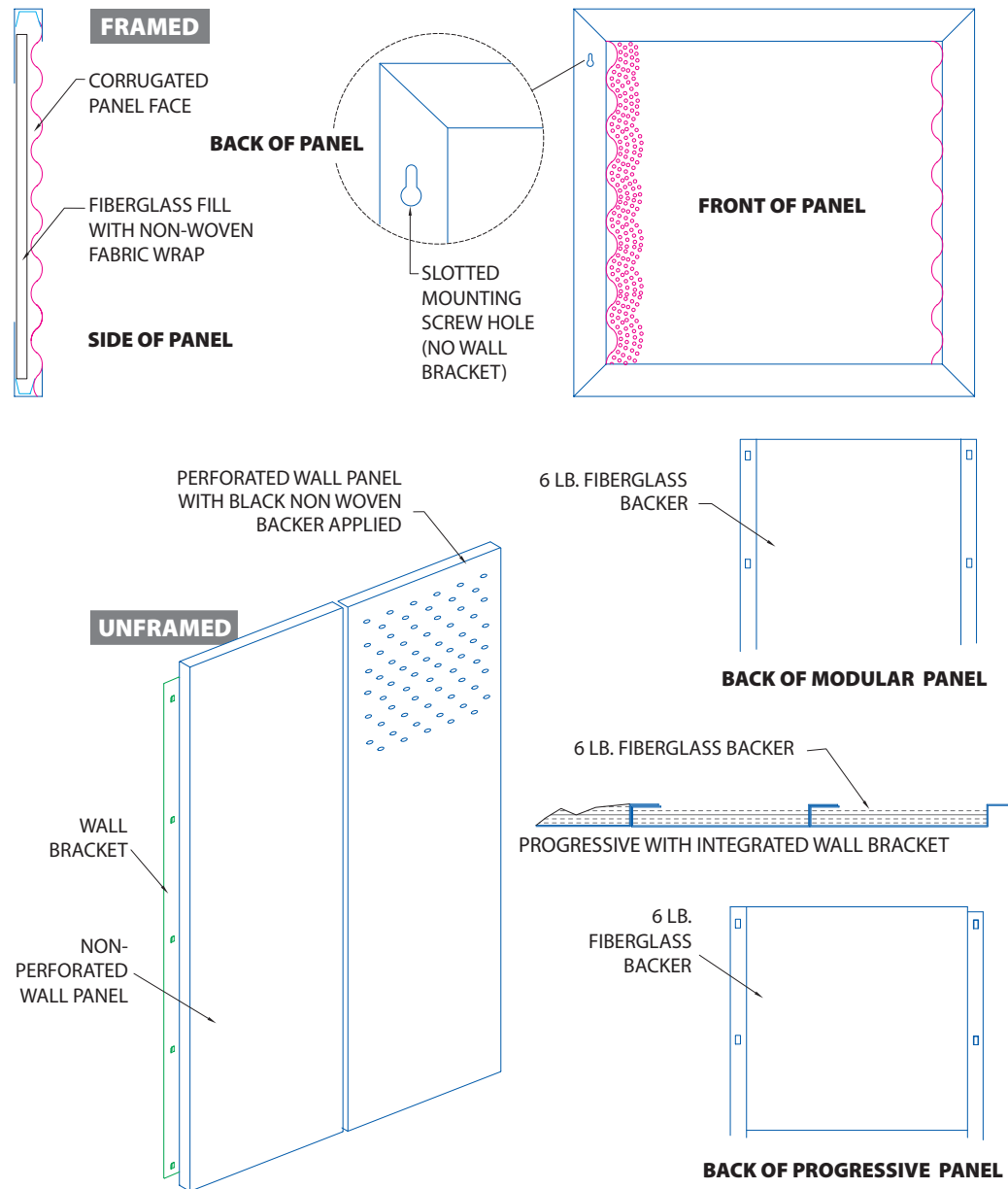
- Installer must inspect the area that is to receive the metal ceiling system for conditions that may affect the installation and notify, in writing, any conditions that must be rectified before commencing
- All work above the ceiling shall be completed before proceeding with this installation
- All wet work shall be completed and thoroughly dry before proceeding with this installation

#### 3.02 Installation

- Metal Ceiling components shall be delivered in unopened cartons and shall be clearly marked with manufacturer's name
- Material shall be stored in dry and protected areas
- Install the ceiling system in accordance with the manufacturer's recommendations and the approved shop drawings
- Cut panels shall, where possible, not be less than one half of full size
- Panels shall be free from defects and damaged panels shall be removed and replaced

# METAL WALL PANEL SYSTEM

SIZE (INCHES)	Min. 12x24, Max. 36x144
ACCESSIBILITY	Modular or progressive
VISUAL	Concealed
EDGE DETAIL	Square or Reveal
MATERIALS	Steel, Aluminum, Stainless
FINISHES	Painted, Natural
RELATIVE COST	\$\$



## OVERVIEW

Steel Ceilings Wall Panel Systems are flexible ways for fastening wall panels to substructures such as drywall, concrete block, etc. Their benefit over other systems are their simplicity and alignment. The wall panels can be used for decorative, acoustic or protection purposes (e.g., high people-traffic areas).

## MODULE

Wall panels can be made in various sizes. Modules are either independently or progressively attached, depending on requirements.

## METAL

The metal panels are manufactured from various gauges of galvanized steel, aluminum or stainless steel which relate to the module size chosen and the use to which the panels will be put.

## PERFORATIONS

A full range of perforation patterns are available with or without plain borders. Steel Ceilings maintains a range of perforating dies in-house and custom perforations can be provided. Perforation patterns can be staggered, diagonal or straight row and the perforations can be provided in round, square or oblong holes in various diameters and sizes. The panels can also be provided without perforations.

## EDGE TREATMENTS

The edges of the panels are square.

## ACOUSTICS

The wall panels are usually provided with 6-lb.-per-cubic-foot density fiberglass backer pad that assists acoustics both from resonance and absorption (if perforated). For large holes the fiberglass is normally black faced, or a non-woven black acoustic liner is added.

## TYPE OF INSTALLATION

The wall panel systems consist of standard panels with turned, slotted or keyholed edges which hook directly onto screws or vertical wall strips.

## MAINTENANCE BENEFIT

The wall panels can be made in either non-accessible, progressively accessible or fully independently accessible.

## CONCEALED OR EXPOSED SUSPENSION SYSTEM

The wall panel fixing is completely concealed.

## FINISHES

The finished appearance of the ceiling system is either a powder paint finish in white or color or a variety of metals including stainless steel, anodized or brushed aluminum.

## APPLICATIONS

This fully accessible ceiling can be used for interior applications only, unless special wedges are added for a protected exterior application where wind load requirements need to be considered and special installation procedures need to be followed.

## FIRE PERFORMANCE

The ceiling system has been tested in accordance with ASTM E-84 and is considered incombustible. The material has a Flame Spread of less than 25 and Smoke Generation of less than 50.

## IMPACT

All materials are 100% recyclable with a high recycled content.